



# MINERAL INFORMATION SERVICE

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MINERAL INFORMATION SERVICE is a monthly news release concerning the mineral resources and industry of CALIFORNIA, designed to inform the public of the discoveries, operations, markets, statistics, and new publications. It is distributed without cost upon request.

## MINING AND INDUSTRIAL NEWS NOTES

### Rare-Earth Deposit Found in California

An important discovery of rare-earth minerals in an extremely unusual geological formation has been uncovered in southeastern California. The deposit lies near Mountain Pass Service Station on Route 91 in San Bernardino County, 53 miles southwest of Las Vegas, Nevada, and 33 miles northeast of Baker, California. The discovery was made in April 1949, by two of the owners, Clarence Watkins and Herbert S. Woodward of Goodsprings, Nevada.

The unusual nature of the deposit was recognized when the minerals were found to be radioactive by test with the Geiger counter. A preliminary geologic examination has been made by D. Foster Hewett of the U.S. Geological Survey who states that within an area of about 600 by 1,500 feet underlain by Archean rocks, there are at least five veins, three of which contain considerable bastnasite, a fluorocarbonate of cerium and lanthanum, with thorium and uranium. The uranium and thorium content, however, appears to be too small to make the deposit of commercial interest for the recovery of these two elements.

In a shallow shaft, the largest vein is about 15 feet wide and it contains between 20 and 30 percent bastnasite. Other rare-earth minerals are present. Accessory minerals are limonite, hematite, barite, fluorite, siderite, quartz, and a little galena. Bastnasite is commonly found in small quantities in some pegmatites; the deposit near Mountain Pass is several lodes in which the most abundant mineral is bastnasite.

Mr. Hewett states that "there can be no doubt that the lodes of the area are a potential commercial source of cerium and lanthanum, the present supply of which is derived from monazite, a mineral largely imported".

### Imperial County Pumice Operation

Approximately 500 cars of pumice have been shipped by the Superlite Corporation from their Obsidian Butte deposit located 7½ airline miles northwest of Calipatria. All production to date has been transported to Phoenix, Arizona, but present construction of a pumice-block plant at Calipatria by the same organization will soon allow utilization of the material for the Imperial Valley building industry.

Modern and efficient mining and plant equipment, in use at the quarry, includes a 3/4-yard shovel, 10-yard carryall, bulldozers, jaw and roll crushers and vibrating screens. Products include 1/8- to 3/4-inch screened pumice aggregate. Large boulders up to 2 feet in diameter are shipped to Phoenix for processing into abrasive products. Plant capacity is 50 tons per hour. Operations are under the supervision of Morris Butterfield, P.O. Box 758, Calipatria.

### Placer County Gravel Operations

Gold was produced at the Rio Del Oro lode claim a mile and a half southeast of Forest Hill in Placer County during the past summer. Gold occurs in gangue material composed principally of magnesite and is found along a contact of serpentine which strikes north. Although this contact locality has been noted in the past for producing numerous groups of specimen gold ore, the present operators have so far been producing ore of moderate grade. Some small shipments to a smelter have been made. C.W. Doherty and Edward Morrice, Jr., were the operators.